## **CLAIMS**

5

10

15

20

25

30

- 1. Hatch with dispensing piston for ice cream making machines, characterized in that it comprises at least one cylindrical seat (7) having a vertical axis communicating by means of a radial duct (4,5) with the freezing cylinder (1) and housing, in a manner rotatable about its axis, a cylindrical sleeve (18) provided with a radial hole (20) and with operating means (22) for aligning in a first position said hole (20) with the outlet of the radial duct (4,5) connected to the freezing cylinder (1), while in a second position this cylindrical sleeve (18) closes off the connection with the freezing cylinder (1), said sleeve having mounted axially slidably inside it a dispensing piston (23), the bottom of said second cylindrical seat (7) being closed off by a base element (27) provided with a plurality of openings (30) suitably shaped for extruding the ice cream.
- 2. Hatch according to Claim 1, with the dual possibility of choosing the form of ice cream dispensed, characterized in that this hatch may be in the form of a double hatch, having two parallel cylindrical seats (6,7) with vertical axes each receiving a piston element (12,23), said cylindrical seats being both connected by means of two radial ducts (8,9) to the same freezing cylinder (1), one of said seats receiving a normal dispensing piston (12) and being closed at the bottom by a normal base plate provided with a fretted or flower-shaped hole (10), while the other seat houses, in a manner rotatable about its axis, a cylindrical sleeve (18) provided with a radial hole (20) and with operating means (22) for aligning in a first position said hole (20) with the outlet of the radial duct (4,5) connected to the freezing cylinder (1), while in a second position this cylindrical sleeve (18) closes off the connection with the freezing cylinder (1), a dispensing piston (23) being mounted in an axially slidable manner inside said sleeve (18), the bottom of said cylindrical seat (7) being provided with a base element (27) provided with a plurality of openings (30) which are suitably shaped for extruding the ice cream.
- 3. Hatch according to the preceding claims, in which the bottom of the said piston (23) co-operating with said ice cream extrusion element (27) is provided with projections (130) complementing the holes (30) of the said extrusion element (27).

WO 2005/048729 PCT/EP2004/052646

- 4. Hatch according to the preceding claims, characterized in that means (25,26) are provided for exact positioning of said piston (23) inside its cylindrical seat in said sleeve (18) in such a way that the said projections (130) on the bottom of the piston (23) are exactly aligned with the holes (30) in the complementary extrusion element (27).
- 5. Hatch according to any one of the preceding claims, characterized in that said pistons (12,23) may be operated both manually and mechanically or in a mixed manual/mechanical manner.
- 6. Hatch according to any one of the preceding claims, characterized in that the ice cream dispensing side of said hatch may be associated with means for dispensing a dressing syrup.

5

- 7. Hatch according to any one of the preceding claims, suitable for mounting on a single-cylinder machine.
- 8. Hatch according to any one of the preceding Claims 1 to 6, suitable for mounting on a machine with several freezing cylinders and in particular a twincylinder machine.
  - 9. Hatch according to Claim 8, suitable for mounting also at the mixing outlet of the hatch of a twin-cylinder machine